



(19)

Generated Document.

(11) Publication number: **03256516 A****PATENT ABSTRACTS OF JAPAN**(21) Application number: **02054299**(51) Int. Cl.: **H02H 3/087 A01B 63/10 F16K 31/06 F16K 31/06 G01R 31/02**(22) Application date: **06.03.90**

(30) Priority:

(43) Date of application publication: **15.11.91**

(84) Designated contracting states:

(71) Applicant: **KUBOTA CORP**(72) Inventor: **URA TAKESHI  
KATAYAMA YOSHIYUKI**

(74) Representative:

**(54) SHORT CIRCUIT  
PROTECTIVE DEVICE FOR  
ELECTROMOTIVE  
ACTUATOR**

(57) Abstract:

**PURPOSE:** To prevent malfunction of an actuator and its circuits, and damage of the circuits even through a short circuit occurs, by providing a short circuit detecting means, changing over the actuator to an inoperating condition and

maintaining this condition.

CONSTITUTION: A short circuit detecting transistor Tr2 is connected to the collector of a transistor (Tr1). During normal operation, the transistor Tr2 remains an 'off' condition, and, when electromagnetic solenoids 27 and 28 are short-circuited, the transistor Tr2 becomes 'on' and detects a short circuit. In accordance with the detection of the transistor Tr2, a signal from a controller 25 is forced to be changed over to an inoperating condition and a change-over hold circuit 35 maintains this condition. When a short circuit occurs, the transistor Tr2 detects a voltage change, and a latch circuit 36 stops a supply of a drive current and, without changing over to a current supply condition, maintains this condition until a main power source is interrupted.

COPYRIGHT: (C)1991, JPO&Japio



